

Bandpass Filter

BPF-B190+

50Ω 185 to 195 MHz

Maximum Ratings

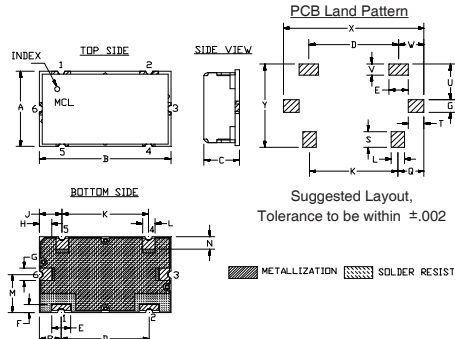
Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
RF Power Input	0.5W Max.

Permanent damage may occur if any of these limits are exceeded.

Pin Connections

INPUT	1
OUTPUT	2
GROUND	3, 4, 5, 6

Outline Drawing

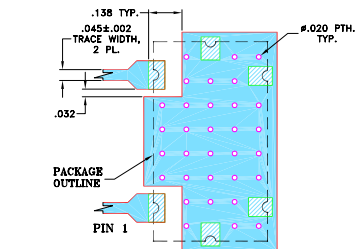


Outline Dimensions (inch/mm)

A	B	C	D	E	F	G	H	J	K	L	M
.472"	.826"	.220"	.551"	.118"	.047"	.078"	.076"	.142"	.543"	.078"	.236"
11.99	20.98	5.59	14.00	3.00	1.19	1.98	1.92	3.61	13.79	1.98	5.99
N	P	Q	S	T	U	V	W	X	Y		wt
.079"	.138"	.162"	.098"	.096"	.217"	.067"	.157"	.866"	.512"		grams
2.01	3.51	4.11	2.49	2.44	5.51	1.70	3.99	22.00	13.00		6.0

Note: Please refer to case style drawing for details

Demo Board MCL P/N: TB-400+ Suggested PCB Layout (PL-247)



- NOTES:
- TRACE WIDTH IS SHOWN FOR FR4 WITH DIELECTRIC THICKNESS .025"±.002". COPPER: 1/2 OZ. EACH SIDE. FOR OTHER MATERIALS TRACE WIDTH MAY NEED TO BE MODIFIED.
 - BOTTOM SIDE OF THE PCB IS CONTINUOUS GROUND PLANE.
- Legend:
 DENOTES PCB COPPER LAYOUT WITH SMOBC (SOLDER MASK OVER BARE COPPER)
 DENOTES COPPER LAND PATTERN FREE OF SOLDERMASK

Features

- Excellent rejection
- Flat Group Delay @ Passband
- Good VSWR, 1.15:1 typ. @ Passband

Applications

- Receivers / Transmitters
- Radio microphones
- Military communication



Generic photo used for illustration purposes only
CASE STYLE: HZ1198

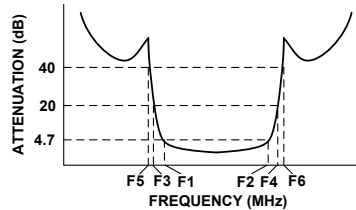
+RoHS Compliant

The +Suffix identifies RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications

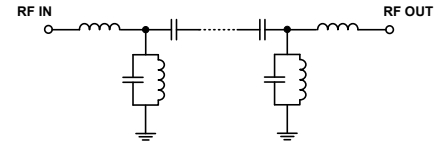
Bandpass Filter Electrical Specifications (T_{AMB} = 25°C)

CENTER FREQ. (MHz)	PASSBAND (MHz) (Loss < 4.7dB) F1 - F2	STOPBANDS (MHz)				VSWR (:1)	
		Loss > 20dB F3	Loss > 40dB F4	Loss > 40dB F5	Loss > 40dB F6	Passband Max.	Stopband Typ.
190	185 - 195	170	212	155	230 - 2000	1.5	30

Typical Frequency Response

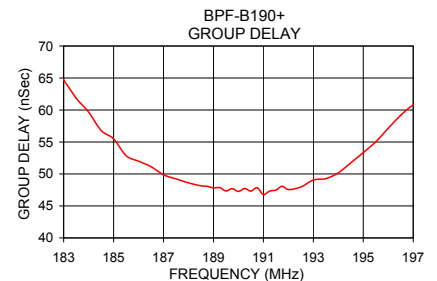
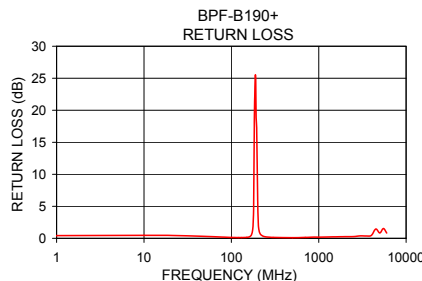
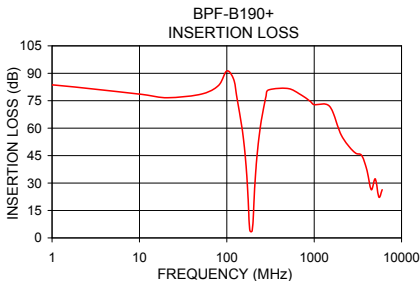


Functional Schematic



Typical Performance Data at 25°C

Frequency (MHz)	Insertion Loss (dB)		Return Loss (dB)	Frequency (MHz)	Group Delay (nsec)
	\bar{x}	σ			
1.0	83.66	0.86	0.42	183.0	66.14
155.0	54.14	0.72	0.18	184.0	60.77
170.0	32.66	0.88	0.55	185.0	56.86
175.0	22.01	1.08	1.21	186.0	52.82
179.0	11.55	1.21	3.47	187.0	50.61
182.0	5.48	0.57	11.84	188.0	49.31
185.0	3.75	0.09	21.84	188.5	48.83
190.0	3.37	0.03	24.85	189.0	48.56
195.0	3.85	0.13	17.06	189.5	48.12
198.0	5.70	0.73	14.31	190.0	47.85
201.0	11.44	1.32	4.25	190.5	47.87
205.0	20.72	1.15	1.71	191.0	47.74
212.0	33.12	0.82	0.80	192.0	47.53
230.0	52.25	0.54	0.34	193.0	49.08
500.0	81.70	0.63	0.10	194.0	50.24
700.0	78.33	0.57	0.14	195.0	53.06
1000.0	72.87	0.33	0.18	196.0	56.55
2000.0	57.07	0.29	0.26	197.0	60.98



Notes

- Performance and quality attributes and conditions not expressly stated in this specification document are intended to be excluded and do not form a part of this specification document.
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